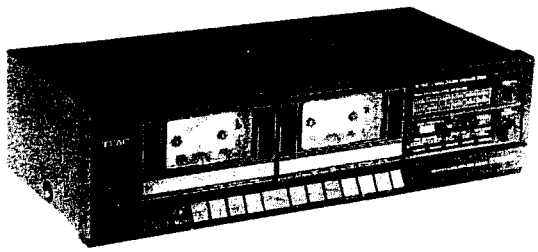
229

TEAC®



SERVICE MANUAL

W-315C/W-310C/W-305/W-300

Stereo Double Cassette Deck

CAUTION

⚠Parts marked with this sign are safety critical components. They must always be replaced with indentical components– refer to the appropriate parts list and ensure exact replacement.

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing corporation.
"Dolby" and the double-D symbol ◻◻ are trademarks of Dolby Laboratories Licensing Corporation.

Effective: MARCH, 1987, DC-7006

9103002500

229

1. SPECIFICATIONS AND SERVICE DATA

SPECIFICATIONS

Track System 4-track, 2-channel stereo
Heads PLAY I: Playback x 1
REC/PLAY II: Erase x 1, Record/Playback x 1
Type of Tape Cassette tape, C-60 and C-90 (Philips type)
Tape Speed 4.8 cm/s (1-7/8 ips), 9.5 cm/s (3-3/4 ips);(Hi speed Dubbing)
Input (level and impedance)
LINE IN: Specified input level: −9 dB (275 mV)/50 kohms
Min. input level: −19 dB (86.9 mV)
Output (level and load impedance)
OUTPUT: Spec. output level: −3.5 dB (518 mV)/50 kohms
Equalization
METAL: 3180 μs + 70 μs
CrO_2: 3180 μs + 70 μs
NORMAL: 3180 μs + 120 μs
Head Configuration
1/2-track, 1-channel erase head
1/4-track, 2-channel record/playback head
Motor PLAY I: 1 DC servo motor,
REC/PLAY II: 1 DC servo motor
Bias Frequency 100 kHz
Operation position Horizontal
Power Requirements
120/220/240 V AC, 50/60Hz (General Export Model)
120 V AC, 60 Hz (U.S.A./Canada)
220 V AC, 50 Hz (Europe)
240 V AC, 50 Hz (U.K./Australia)
Power Consumption 10 W
Weight 3.2 kg (7-1/16 lbs.) net
Dimensions

SERVICE DATA

MECHANICAL

Tape Speed Deviation 3,000 Hz +90, −60 Hz, 6000 Hz + 180, −120 Hz
Tape Speed Drift 45Hz (LOW SPEED), 90Hz (HIGH SPEED)
Wow and Flutter
Playback: 0.37% (RMS)
Pinch Roller Pressure 250 g to 470 g (8.8 oz to 16.5 oz)
Reel Torque
Take-up: 30 to 65 g-cm (0.42 to 0.91 oz-inch)
Supply: 1 to 6 g-cm (0.014 to 0.083 oz-inch)
F.F.: 55 to 160 g-cm (0.77 to 2.22 oz-inch)
REW: 55 to 160 g-cm (0.77 to 2.22 oz-inch)
Fast Wind Time
120 sec. or less for MTT-5511 (C-60)
Auto End-stop Time 6 sec. or less

ELECTRICAL

Frequency Response
See Figs. 5-7 to 5-9.
Signal-to-noise Ratio
Playback NORMAL: 46 dB min.
Record/playback
METAL, CrO_2: 46 dB min.
NORMAL: 45 dB min.
Erase Efficiency
65 dB min. at 1 kHz (measured with input 10 dB higher than the specified input level).
Channel Separation 30 dB min. at 1 kHz
Adjacent Track Crosstalk 40 dB min. at 125 Hz
Total Harmonic Distortion 2.0% or less with NORMAL
2.5% or less with CrO_2, METAL

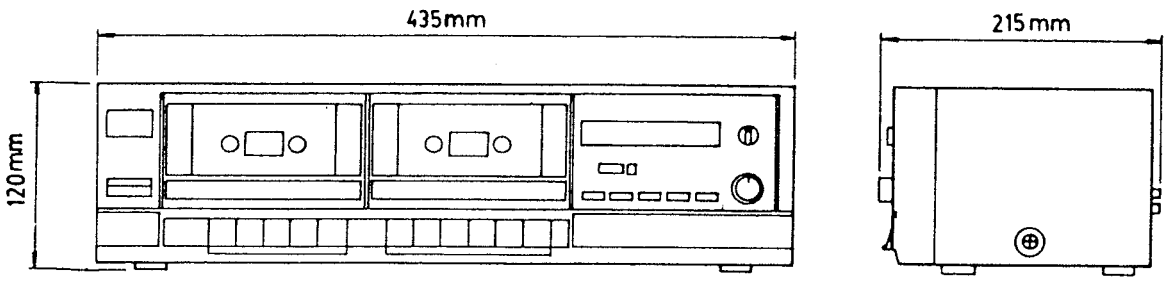
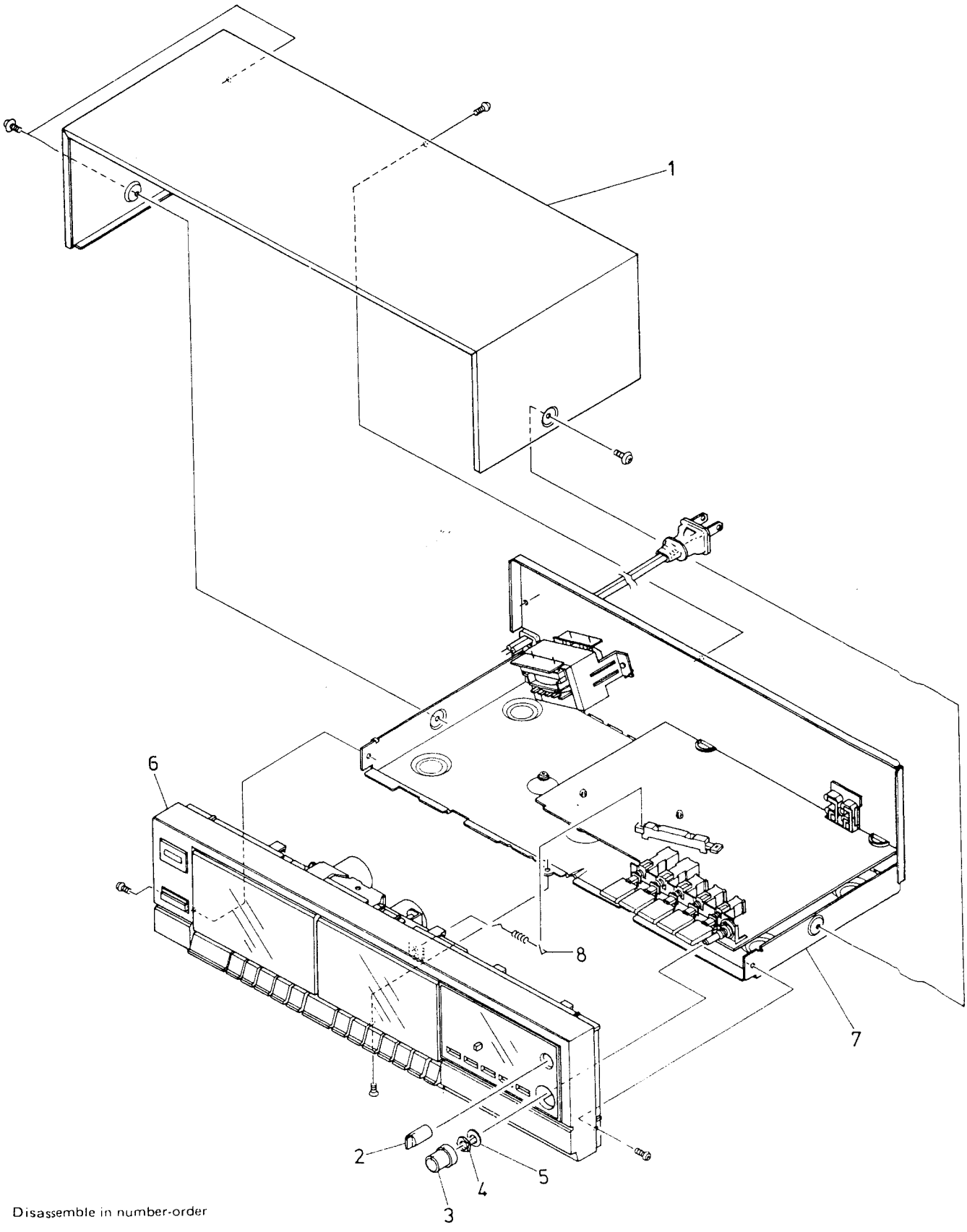


Fig. 1-1

NOTES:
Improvements may result in SPECIFICATIONS AND SERVICE DATA changes.
Value of "dB in the data refers to 0 dB (0.775 V), except where Specified.

2 CASE AND FRONT PANEL REMOVAL



Disassemble in number-order

3 PARTS LOCATION

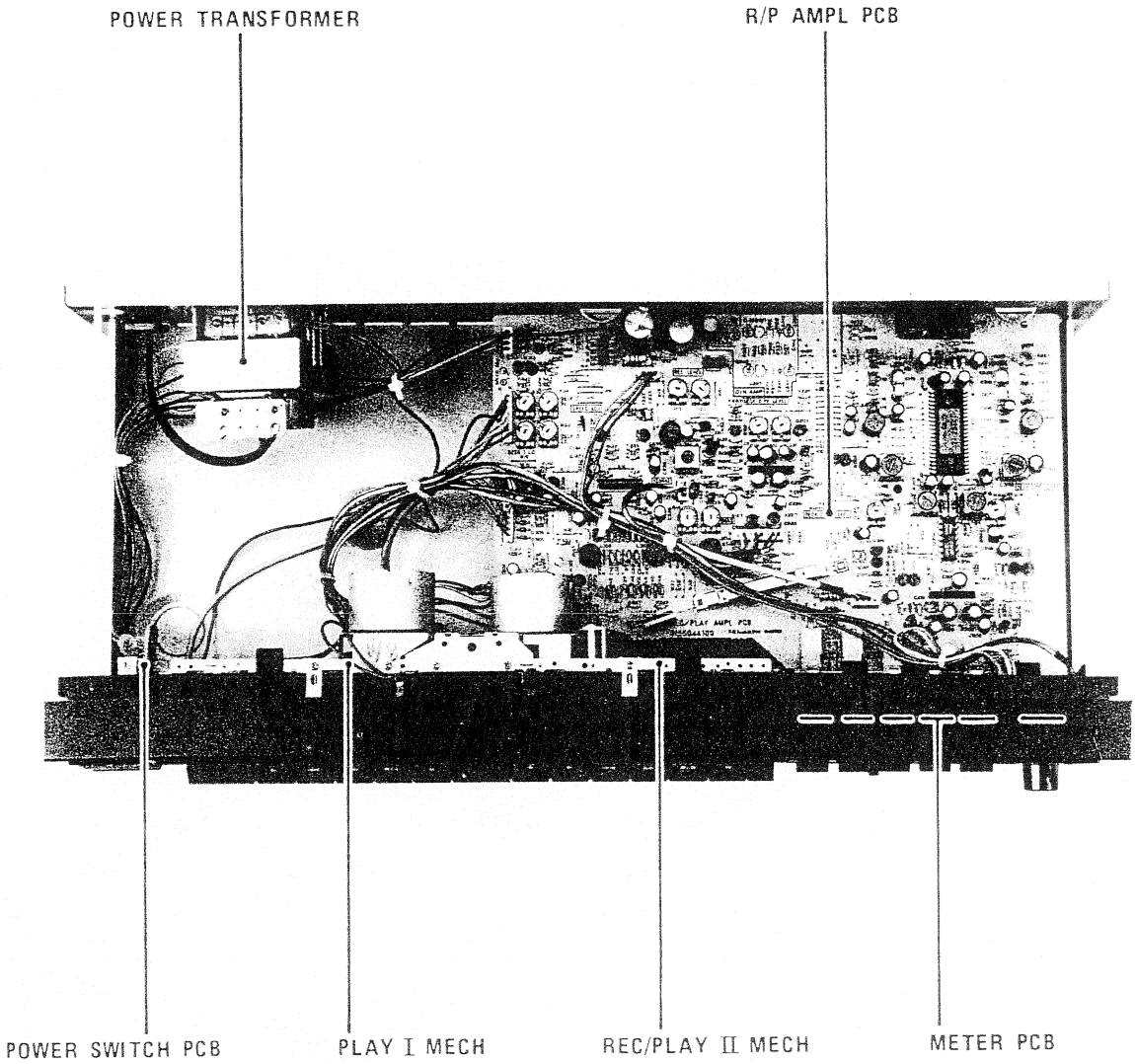


Fig. 3-1 Top view (W-310C)

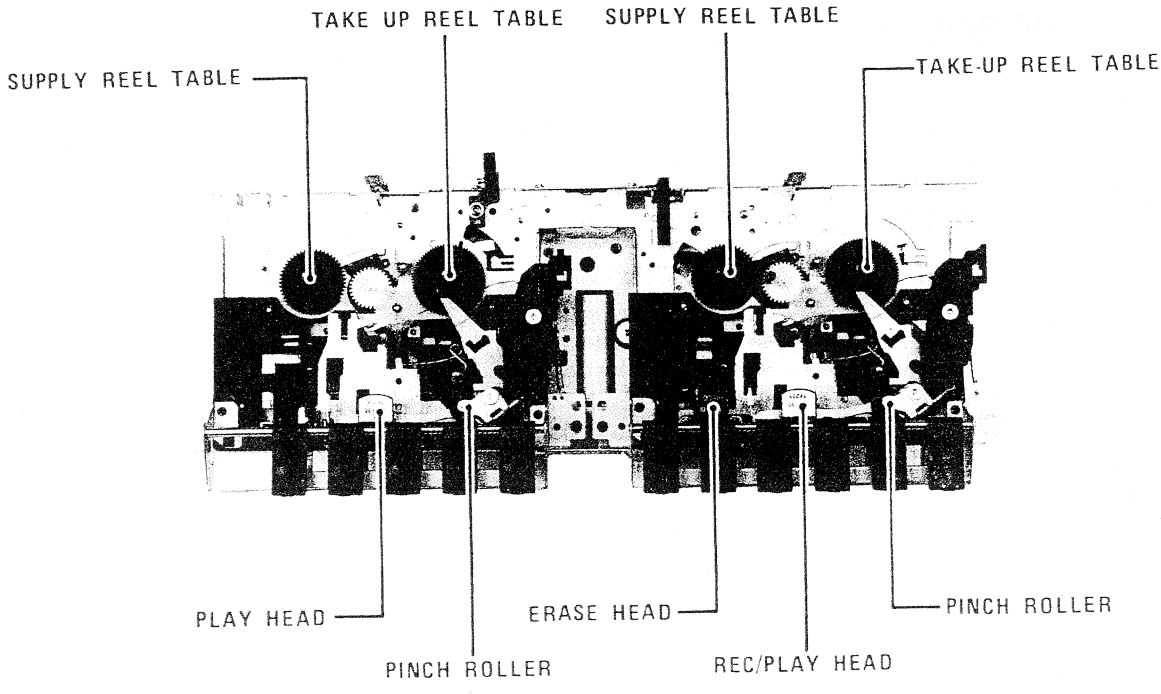


Fig. 3-2 Transport front view

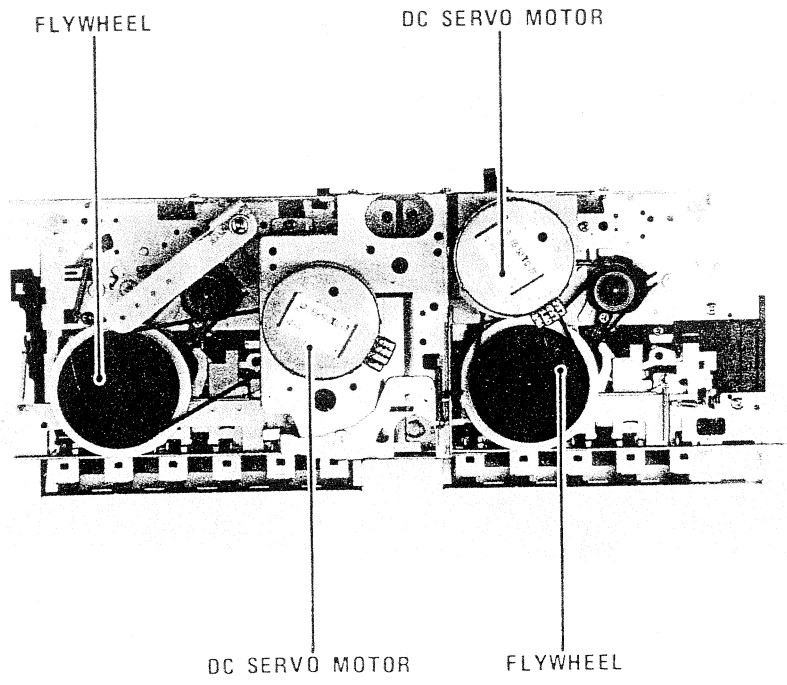


Fig. 3-3 Transport rear view

4 MECHANICAL ADJUSTMENT AND CHECKS

4-1 WOW AND FLUTTER

Note: This measurement should be made at the begining, middle, and the end of the tape.

PLAYBACK

1. Connect a wow-and-flutter meter to the deck as shown in Fig. 4-1.
2. Load and play a TEAC MTT-111 test tape.
3. Check that the reading on the wow-and-flutter meter is within 0.37% (RMS).

4-2 TAPE SPEED

1. Connect a frequency counter to the deck as shown in Fig. 4-1.
2. Simply press POWER switch to ON to rotate the motor, then continue the motor rotation for approx. 1 minute for warmp-up.
3. As soon as the warm-up finishes, load a TEAC MTT-111 test tape with a 3,000 Hz test tone and play the end of the test tape.
4. Adjust each variable resistor to get the following figures. Short TP (SPEED ADJ) to get the double tape speed (HIGH speed). Never press TAPE SPEED switch to HIGH position.

	Adjustment point		Adjustment value
PLAY I	HIGH speed	R32	6030 ~ 6070
	LOW speed	R31	3015 ~ 3035
REC/PLAY II	HIGH speed	R34	5990 ~ 6030
	LOW speed	R33	2995 ~ 3015

* At first, adjust HIGH tape speed.

5. In play mode, check that the following figures are obtained at the beginning and at the end of the tape.

	LOW speed	HIGH speed
Speed deviation	3000 Hz +90, −60 Hz	6000 Hz +180, −120 Hz
Speed drifting	Within 45 Hz	Within 90 Hz

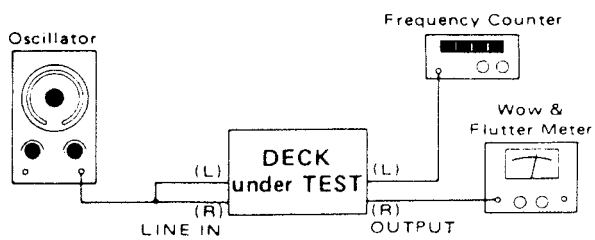


Fig. 4-1

4-3 REEL TORQUE

1. Load the cassette torque meter on the deck and read the pointer indication on the dial scale for each tape transport operation. The measured torque should be within the following specified values:

Specifications:

Take-up: 30 ~ 65 g-cm (0.42 ~ 0.91 oz-inch)
Supply: 1 ~ 6 g-cm (0.014 ~ 0.083 oz-inch)
F.F./REW: 55 ~ 160 g-cm (0.77 ~ 2.2 oz-inch)

4-4 LUBRICATION

Lubrication is only required when parts are replaced. For this purpose, use the oil specified below.

Oil: TEAC spindle oil (from TEAC TZ-255 oil kit),
Mobil D.T.E. Oil Light, or equivalent

Apply a drop of oil with an oil applicator to a point about 1/3 the way down the shaft (from the free end) of the flywheel, then insert the shaft into the capstan housing.

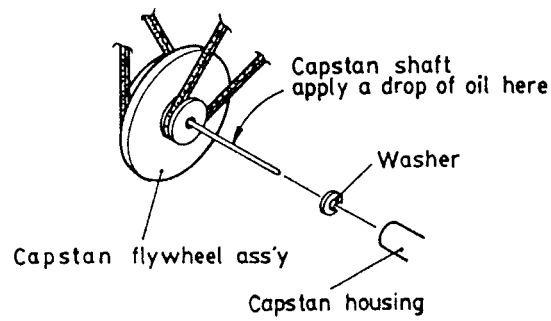


Fig. 4-2

4-5 VOLTAGE CONVERSION (General Export Models only)

1. ALWAYS DISCONNECT THE POWER LINE CORD BEFORE MAKING THESE ADJUSTMENTS!
2. Locate the voltage selector on the rear panel.
3. Using a regular screwdriver, turn the selector until the numerals corresponding to the voltage requirements of your area appear.

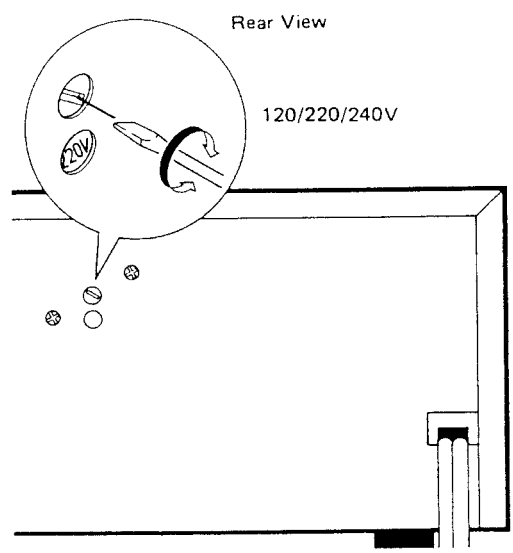


Fig. 4-3

5 ELECTRICAL ADJUSTMENT AND CHECKS

PRECAUTIONS

1. Before performing adjustments and checks clean and demagnetize the entire tape path.
2. Make sure the deck is properly set for the voltage in your locality.
3. In general, adjustments and checks are made in the order of L-ch then R-ch. Double REF. Nos. and test point designations indicate L-ch/R-ch. (Example: R11/R21)
4. 0 dB is referenced to 0.775 V. If an AC voltmeter that references 0 dB to 1 V is used, appropriate compensation should be made.
5. The AC voltmeter used in the procedures must have an input impedance of 1 M-ohmes or more.
6. Note the "Deck settings" at the top of each chart. The settings apply to all check for a specific chart unless explicitly stated otherwise.
7. Since this deck has an automatic tape selector, be sure to use test tapes that have tape position detecting holes.

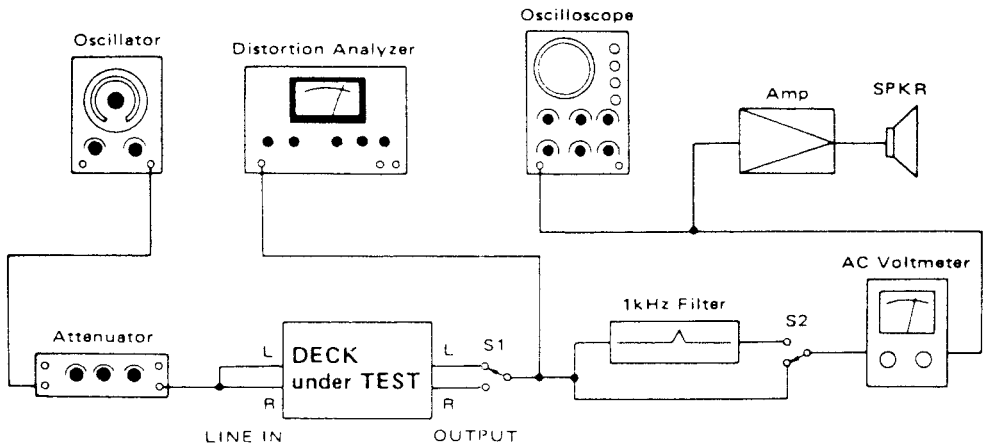


Fig. 5-1 Basic test setup

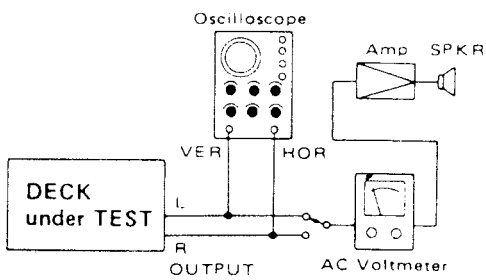


Fig. 5-2 Test setup for azimuth check

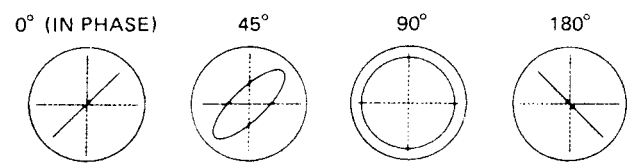


Fig. 5-3 Confirming phase relationship

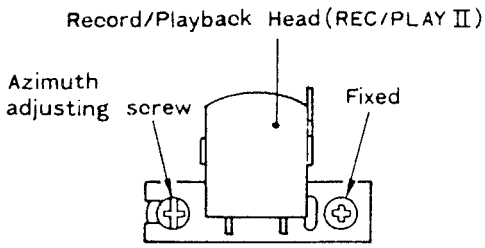


Fig. 5-4 Azimuch screw location

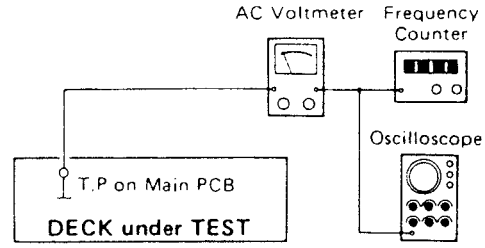


Fig. 5-5 Test setup for bias adjustment

5-1 ADJUSTMENTS AND TEST POINT LOCATIONS

Function		Adjustments	Test points (Measuring point)
Specified output level		R11/R21 R12/R22	T.PL/T.PR (DOLBY)
Bias OSC		L301	T.PL/R (BIAS)
Record bias	NORMAL	R14/R24	OUTPUT terminals
Record level	NORMAL	R13/R23	OUTPUT terminals
REC/PLAY Frequency Response		Check	OUTPUT terminals

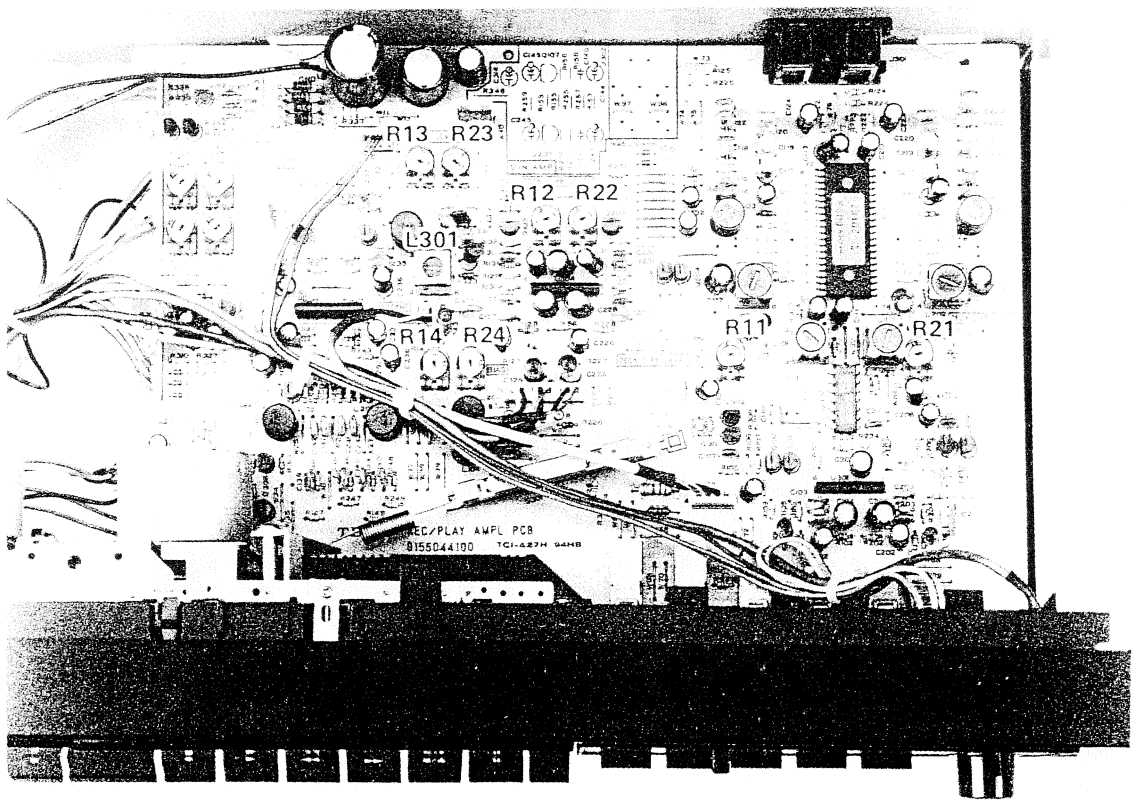


Fig. 5-6

TEAC test tapes:
MTT-150C: For Dolby level calibration
MTT-256: For playback frequency response check for NORMAL
MTT-356: For METAL and CrO_2
MTT-5511: For S/N check with NORMAL

5-2 PLAYBACK PERFORMANCE

Deck settings:
DOLBY NR sw: OUT

ITEM	SETTING	INPUT SIGNAL	ADJUST (or CHECK)	MEASURING POINT: RESULT	REMARKS
1. REC/PLAY head azimuth	Connection: Fig. 5-2	MTT-150C	Check	OUTPUT: Phase: within 45°	Refor to Fig. 5-3
		MTT-256 (10 kHz)	Azimuth screw of R/P head (Fig. 5-4)	OUTPUT: Max. output at L-& R-ch's (on VTVM)	
2. Specified output level	Connection: Fig. 5-1	MTT-150C	R11/R21 (Play I) R12/R22 (Rec/Play II)	T.P (DOLBY): W-315C/W-310C 245mV (–10 dB) W-305/W-300 580mV (–2.5dB)	See page 8
	Connection: Fig. 5-1	MTT-150C	Check	OUTPUT: –3.5 dB ± 1 dB (461 to 581mV)	Spec. output level
3. Frequency response	NORMAL	MTT-256	Check	OUTPUT: Fig. 5-7	
	CrO_2	MTT-356	Check	OUTPUT: Fig. 5-7	
4. Signal-to-noise ratio S/N	Tape: MTT-5511 Play mode	Fully erased MTT-5511 tape (Use bulk tape eraser)	Check	OUTPUT: 46 dB min.	Ratio of spec. output of –3.5 dB to noise

5-3 MONITOR PERFORMANCE

Deck settings:
RECORD-PAUSE mode
DOLBY NR sw: OUT

ITEM	SETTING	INPUT SIGNAL	ADJUST (or CHECK)	MEASURING POINT: RESULT	REMARKS
5. Specified LINE input level		LINE IN: 400Hz/–9 dB (275mV)	RECORDING LEVEL cont. (L/R)	OUTPUT: –3.5 dB ± 1 dB (461mV to 581mV)	Reter to Fig. 5-5
	IMPORTANT: Do not change the setting of the RECORD LEVEL controls after establishing their setting as above.				

5-4 RECORDING PERFORMANCE

Deck settings:
DOLBY NR sw: OUT
RECORDING LEVEL cont. (L/R): Specified position (item 5)

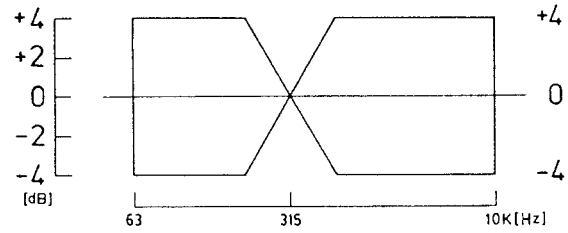
TEAC recording test tapes:
MTT-5571: For METAL
MTT-5561: For CrO_2
MTT-5511: For NORMAL

ITEM	SETTING	INPUT SIGNAL	ADJUST (or CHECK)	MEASURING POINT: RESULT	REMARKS
6. Bias osc	Connection: Fig. 5-5 Record-pause mode	LINE IN: No signal	L301	T.PL/R (BIAS) 100kHz on frequency counter	Specified bias frequency
7. Record bias	Tape: MTT-5511 Rec/play mode	LINE IN: 400Hz & 10kHz alternately/–42 dB (6.15mV) Record and reproduce them.	R14/R24	OUTPUT: Nearly equal level at both frequencies	Repeat if the result is un- satisfactory
8. BIAS FINE control check	Tape: MTT-5511 BIAS FINE cont: Fully "–" position then fully "+" position	10kHz/–42dB (6.15mV)	Check	Measure output level (record playback) at "–" position then at "+" position Variation between "–" and "+" positions: 5dB or more	W-315C/W-310C only
9. Record level	Tape: MTT-5511	LINE IN: 400Hz/–12dB (195mV) Record and reproduce them.	R13/R23	OUTPUT: –6.5dB (367mV)	
	Tape: MTT-5561 Tape: MTT-5571		Check	OUTPUT: –6.5dB ± 1.5dB (308mV to 436mV)	
10. Frequency response	Tape: MTT-5511 Tape: MTT-5561 Tape: MTT-5571	LINE IN: Required signal/ –42 dB (6.15mV)	Check	OUTPUT: Fig. 5-8 to 5-9	If out of spec., recheck #7
11. Signal-to-noise ratio	Tape: MTT-5571 Tape: MTT-5561 Tape: MTT-5511	LINE IN: 1kHz/–9 dB (275mV) ↓ no signal	Check	OUTPUT: 46 dB min. [METAL, CrO_2] 45dB min. [NORMAL]	Ratio of specified output of –3.5dB to noise

5-5 FREQUENCY RESPONSE

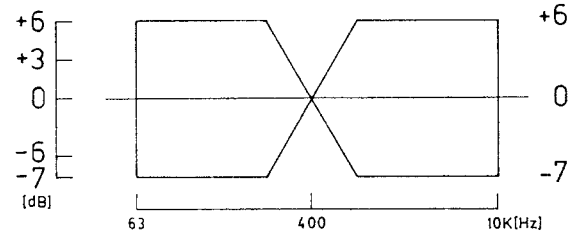
5-5-1 PLAYBACK

Tape: MTT-256 (NORMAL)



5-5-2 OVERALL

Tape: MTT-5511 (NORMAL)
Tape: MTT-5561 (CrO_2)
Tape: MTT-5571 (METAL)



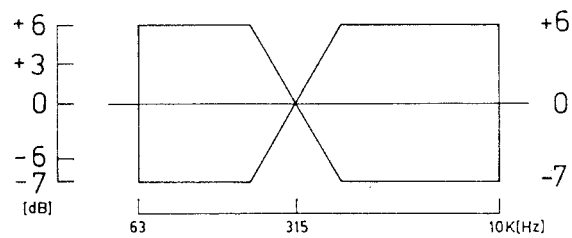
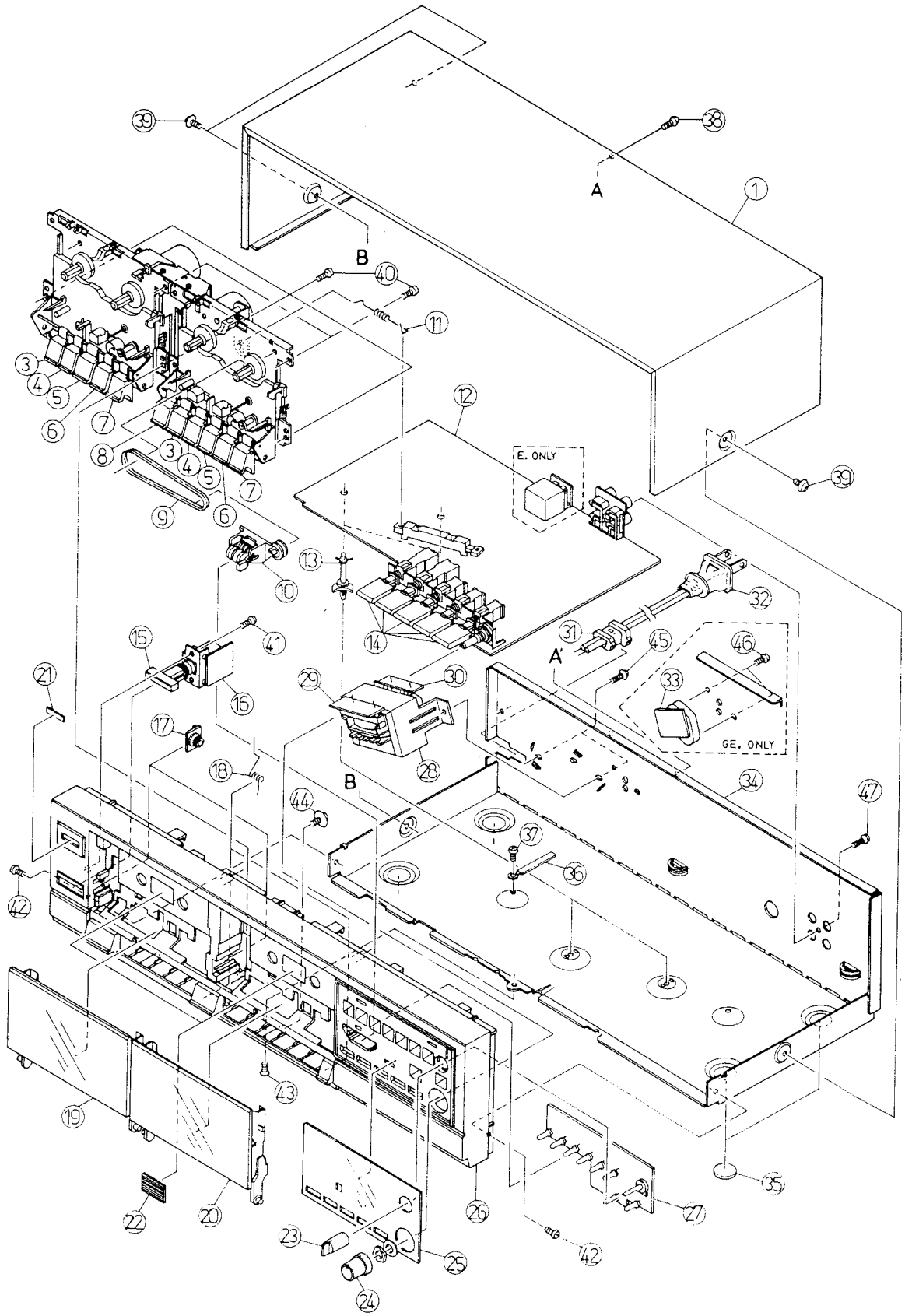


Fig. 5-9 Overall frequency response (Dubbing: Low/High speed)

6 EXPLODED VIEWS AND PARTS LIST

EXPLODED VIEW-1



EXPLODED VIEW-1

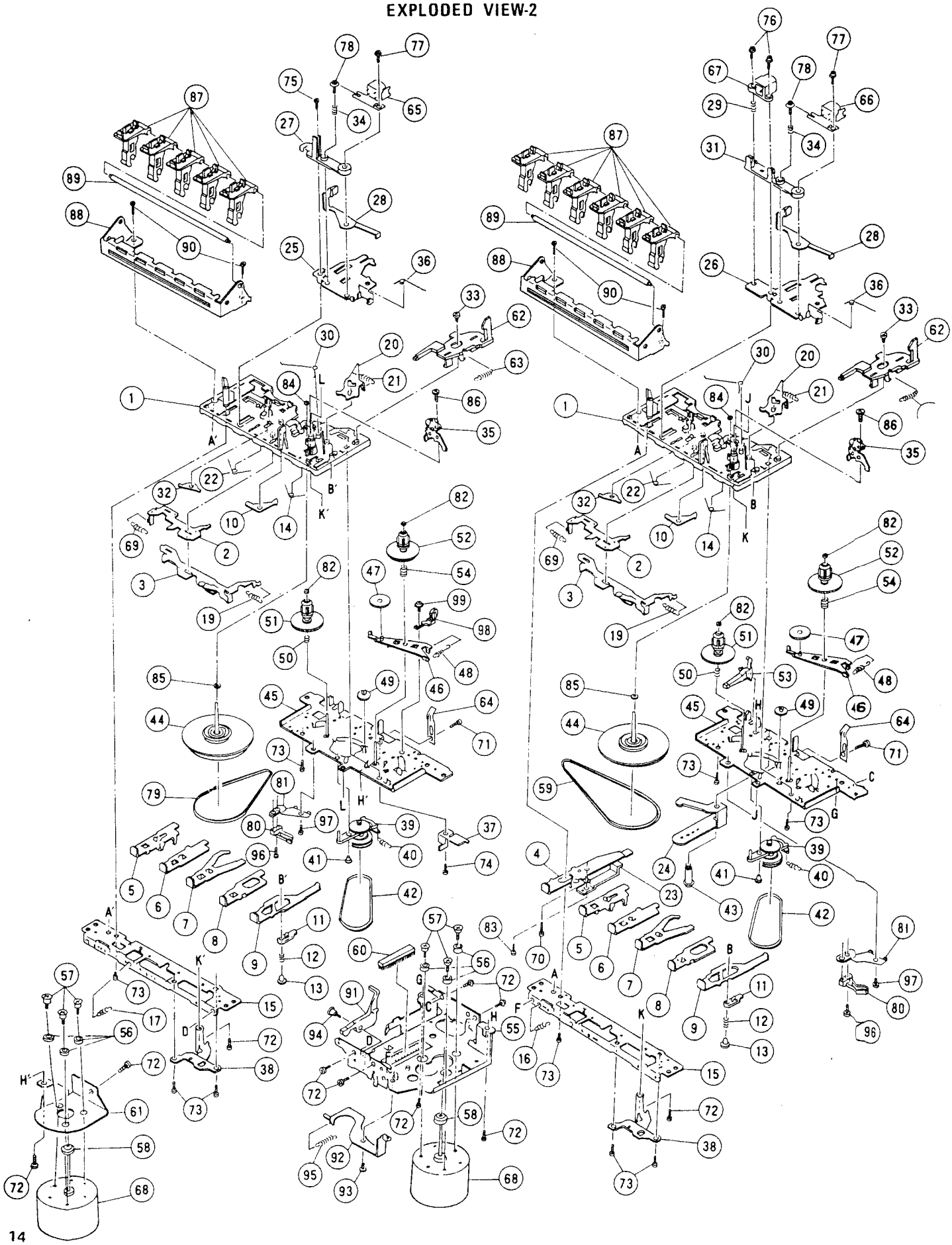
Parts marked with *require longer delivery time.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1 - 1	*9260053001	BONNET	
1 - 3	9260054000	BUTTON, PLAY	
1 - 4	9260053900	BUTTON, REW	
1 - 5	9260053800	BUTTON, FF	
1 - 6	9260054100	BUTTON, STOP	
1 - 7	9260054200	BUTTON, PAUSE	
1 - 8	9260054300	BUTTON, RECORD	
1 - 9	9260055900	BELT, COUNTER, φ60	
1 - 10	9260057700	COUNTER	
1 - 11	*9260056101	BAR, RECORD	
1 - 12	*9145044102	PCB ASSY, R/P (W-315C/W-310C) [EXCEPT E]	REF. PAGE 17 & 21
	*9145044112	PCB ASSY, R/P (W-315C/W-310C) [E]	REF. PAGE 17 & 21
	*9145043101	PCB ASSY, R/P (W-305/W-300) [EXCEPT E]	REF. PAGE 19 & 21
	*9145043111	PCB ASSY, R/P (W-305/W-300) [E]	
1 - 13	*9260057800	SUPPORT, PCB	
1 - 14	9260055800	BUTTON (104), PUSH	
1 - 15	9260057300	BUTTON (103), POWER	
1 - 16	*9145043300	PCB ASSY, POWER SWITCH	
1 - 17	*9260057600	DAMPER (JA-230)	
1 - 18	*9260056000	SPRING	
1 - 19	*9260058000	LOADING CASE B	
1 - 20	*9260058100	LOADING CASE C	
1 - 21	*5720175500	TEAC EMBLEM	
1 - 22	*5800822400	REFLECT TAPE	
1 - 23	9260057400	KNOB (101), BIAS	
1 - 24	9260055700	KNOB (103), REC	
1 - 25	*9260053201	COVER, METER (W-310C)	
	*9260061700	COVER, METER (W-315C)	
	*9260053101	COVER, METER (W-300)	
	*9260061800	COVER, METER (W-305)	
1 - 26	*9260053400	PANEL, FRONT (W-315C/W-310C)	
	*9260053300	PANEL, FRONT (W-305/W-300)	
1 - 27	*9145044200	PCB ASSY, METER (W-315C/W-310C)	REF. PAGE 18 & 21
	*9145043200	PCB ASSY, METER (W-305/W-300)	REF. PAGE 20 & 21
1 - 28	⚠9125047001	TRANSFORMER, POWER [US] [T]	
	⚠9125047501	TRANSFORMER, POWER [C]	
	⚠9125047201	TRANSFORMER, POWER [E] [A] [UK]	
	⚠9125047701	TRANSFORMER, POWER [GE]	
	⚠9125047800	TRANSFORMER, POWER [J]	
1 - 29	⚠*9155049200	PCB, TRANS. [US] [C]	REF. PAGE 16
	*9155043400	PCB A, TRANS. [GE] [T]	REF. PAGE 16
	*9155043600	PCB C, TRANS. [E] [A] [UK]	REF. PAGE 16 & 21
1 - 30	*9155043500	PCB B, TRANS.	REF. PAGE 16
1 - 31	⚠*5317003400	BUSHING	
1 - 32	⚠*9109025800	CORD, AC [US] [C] [GE] [T]	
	⚠*9109025700	CORD, AC [E]	
	⚠*9109026000	CORD, AC [A]	
	⚠*9109025900	CORD, AC [UK]	
	⚠*9109026100	CORD, AC [J]	
1 - 33	*9145041800	PCB ASSY, VOLTAGE SELECTOR SWITCH [GE]	REF. PAGE 21
1 - 34		CHASSIS, MAIN [EXCEPT E]	
		CHASSIS, MAIN [E]	
1 - 35	*9260057000	FOOT	
1 - 36	*9788823045	CLAMPER, WIRE	
1 - 37	*9783203006	SCREW, BTT-S M3x6	
1 - 38	*9783113008	SCREW, C TITE M3x8 NI-BLK	
1 - 39	*9783053006	SCREW, CAP-S M3x6 BLK	
1 - 40	*9783603010	SCREW, BTT-P M3x10	
1 - 41	*9783603008	SCREW, BTT-P M3x8	
1 - 42	*9783203006	SCREW, BTT-S M3x6	
1 - 43	*9783333008	SCREW, FTT-S M3x8	
1 - 44	*9783343010	SCREW, SEMS-F WF10PTB M3x10	
1 - 45	*9783103008	SCREW, CAP-S M3x8	
1 - 46	*9783603008	SCREW, BTT-P M3x8	
1 - 47	*9783603008	SCREW, BTT-P M3x8	

[US]: U.S.A. [E]: EUROPE [UK]: U.K. [C]: CANADA

[A]: AUSTRALIA [GE]: GENERAL EXPORT [T]: TAIWAN [J]: JAPAN

EXPLODED VIEW-2



EXPLODED VIEW-2

REF. NO.	PARTS NO.	DESCRIPTION
2 - 1	*9278195100	MAIN BASE ASSY
2 - 2	*9278195200	PLATE, SWITCH
2 - 3	*9278195300	ACTUATOR ASSY, PUSH BUTTON
2 - 4	*9278195400	LEVER, REC BUTTON
2 - 5	*9278195500	LEVER, PLAY BUTTON
2 - 6	*9278195600	LEVER, RWD BUTTON
2 - 7	*9278195700	LEVER, FF BUTTON
2 - 8	*9278195800	LEVER, STOP BUTTON
2 - 9	*9278195900	LEVER ASSY, PAUSE BUTTON
2 - 10	*9278196000	LEVER, RWD
2 - 11	*9278196100	LEVER, PAUSE
2 - 12	*9278196200	SPRING, PAUSE LEVER
2 - 13	*9278196300	STOPPER, PAUSE
2 - 14	*9278196400	SPRING(C), BUTTON LEVER
2 - 15	*9278196500	SUB CHASSIS
2 - 16	*9278196600	SPRING(A), BUTTON LEVER
2 - 17	*9278196700	SPRING(S), PLAY BUTTON LEVER
2 - 19	*9278196900	SPRING, ACTUATOR
2 - 20	*9278197000	LEVER, AUTO
2 - 21	*9278197100	SPRING, AUTO LEVER
2 - 22	*9278197200	SPRING(B), BUTTON LEVER
2 - 23	*9260055500	LEVER(A), RECORD
2 - 24	*9260055600	LEVER(B), RECORD
2 - 25	*9278197500	HEAD PANEL
2 - 26	*9278197600	HEAD PANEL
2 - 27	*9278197700	HEAD BASE
2 - 28	*9278197800	PLATE ASSY, SENSING
2 - 29	*9278197900	SPRING, E.H.
2 - 30	*9278198000	SPRING(S), HEAD PANEL
2 - 31	*9278198100	HEAD BASE
2 - 32	*9278198200	STOPPER, P.R.
2 - 33	*9278198300	SCREW, P.M.E.
2 - 34	*9278198400	SPRING
2 - 35	9278198500	ARM ASSY, PINCH ROLLER
2 - 36	*9278198600	SPRING, PINCH ROLLER
2 - 37	*9278198700	BRACKET, PAUSE PROTECTION
2 - 38	*9278198800	METAL GUIDE
2 - 39	9278198900	ARM ASSY, RF PULLEY
2 - 40	*9278199000	SPRING, RF PULLEY ARM
2 - 41	*9278199100	COLLER SCREW, RF ARM
2 - 42	9278199200	BELT, RF
2 - 43	*9260057500	COLLAR SCREW
2 - 44	9278199400	FLY WHEEL ASSY
2 - 45	*9278199500	REEL BASE ASSY
2 - 46	*9278199600	PLATE ASSY, TAKE UP GEAR
2 - 47	*9278199700	GEAR, TAKE UP ROLLER
2 - 48	*9278199800	SPRING, T.G. PLATE
2 - 49	9278199900	GEAR, FF
2 - 50	9278200000	SPRING, BACK TENSION
2 - 51	9278200100	REEL ASSY, SUPPLY

REF. NO.	PARTS NO.	DESCRIPTION
2 - 52	9278200200	REEL ASSY, TAKE UP
2 - 53	*9278200300	LEVER, RECORD SAFETY
2 - 54	*9278200400	SPRING, BACK TENSION
2 - 55	*9278200500	BRACKET, MOTOR
2 - 56	*9278200600	RUBBER, MOTOR
2 - 57	*9278200700	COLLAR SCREW (K)
2 - 58	9278200800	PULLEY, MOTOR
2 - 59	9278200900	BELT, MAIN
2 - 60	*9278201000	MAT
2 - 61	*9278201100	BRACKET, MOTOR
2 - 62	*9278201200	LEVER, EJECT SLIDE
2 - 63	*9278201300	SPRING, EJECT SLIDE LEVER
2 - 64	*9278201400	SPRING, PACK
2 - 65	9278201500	HEAD, P.
2 - 66	9278201600	HEAD, R/P
2 - 67	9278201700	HEAD, E.
2 - 68	9278204800	MOTOR (EG-500 YD-2B)
2 - 69	*9278201800	SPRING, SWITCH PLATE
2 - 70	*9278201900	SCREW, TAMS M2x4
2 - 71	*9278202000	SCREW, C TAPPING M2x3
2 - 72	*9278202100	SCREW, C TAPPING M2x4
2 - 73	*9278202200	SCREW, P TAPPING BIND M2x5
2 - 74	*9278202300	SCREW, C TAPPING M2x6
2 - 75	*9278202400	SCREW, M2x6
2 - 76	*9278202500	SCREW, ⊕ ⊖ CAP M2x7.5
2 - 77	*9278202600	SCREW, ⊕⊖ CAP M2x7
2 - 78	*9278202700	SCREW, AZIMUTH M2x7
2 - 79	9278202800	BELT, MAIN
2 - 80	9278202900	SWITCH, LEAF (MSW-1373NBK)
2 - 81	*9278203000	BRACKET, SWITCH
2 - 82	*9278203100	P WASHER CUT 1.2x3.8x04
2 - 83	*2783022003	SCREW, PTT-S M2x3
2 - 84	*9278203300	P WASHER CUT 1.55x3.8x0.5
2 - 85	*9278203400	P WASHER CUT 2.05x4x0.5
2 - 86	*9278203500	SCREW, M.S.
2 - 87	*9278203600	LEVER, OPERATION
2 - 88	*9278203700	B FRAME (S)
2 - 89	*9278203800	SHAFT, BUTTON LEVER
2 - 90	*9278203900	SCREW (FOR CAMERA) M2x7
2 - 91	*9278204000	LEVER (B), P KICK
2 - 92	*9278204100	LEVER (A), P KICK
2 - 93	*9278204200	COLLAR SCREW (A), P.K.
2 - 94	*9278204300	COLLAR SCREW (B), P.K.
2 - 95	*9278204400	SPRING, P KICK LEVER
2 - 96	*9278204500	SCREW (FOR CAMERA) M1.7x3
2 - 97	*9278204600	SCREW, C TAPPING M2x5
2 - 98	*9278204700	CrO_2 SWITCH
2 - 99	*9278204600	SCREW, C TAPPING M2x5

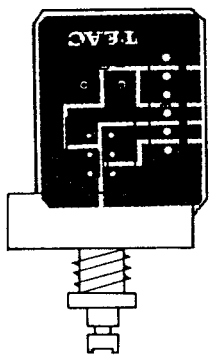
INCLUDED ACCESSORIES

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	*9101368600	OWNER'S MANUAL (ENGLISH)	W-310C/W-300
	*9101368800	OWNER'S MANUAL (MULTI)	W-310C/W-300
	*9101369500	OWNER'S MANUAL (ENGLISH)	W-315C/W-305
	*9101369600	OWNER'S MANUAL (FRENCH)	W-315C/W-305
	*9101370000	OWNER'S MANUAL (JAPANESE)	W-310C
	*9109025100	CORD, IN-OUT	

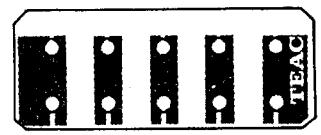
Parts marked with *require longer delivery time.

7 PC BOARDS AND PARTS LIST

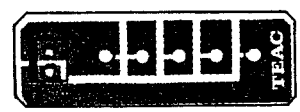
POWER SW PCB ASSY



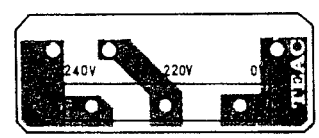
TRANS PCB A



TRANS PCB B



TRANS PCB C

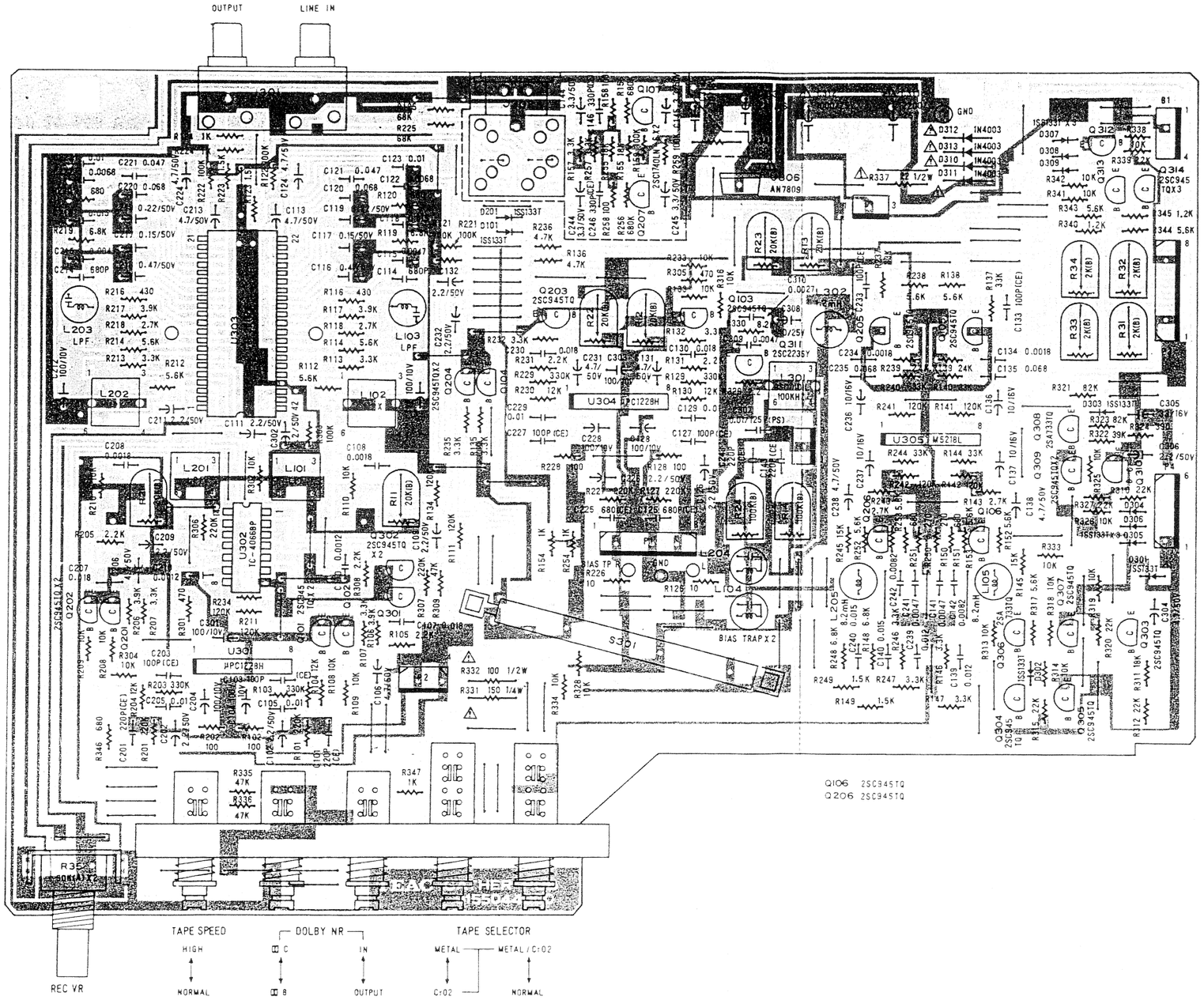


NOTES

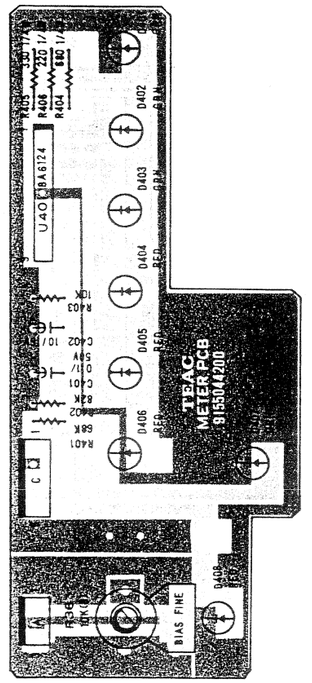
1. PC boards are shown viewed from foil side.
2. The colors on the PC board illustrations have the following significance:
   ▬▬ : GND
   : other
3. Resistor values are in ohms (k=kilo-ohms M=megohms).
4. All capacitor values are in microfarads (p=picofarads).
5. ⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components. Refer to the appropriate parts list to ensure exact replacement.

W-315C/W-310C/W-305/W-300

R/P AMPL PCB ASS'Y (W-315C/W-310C)

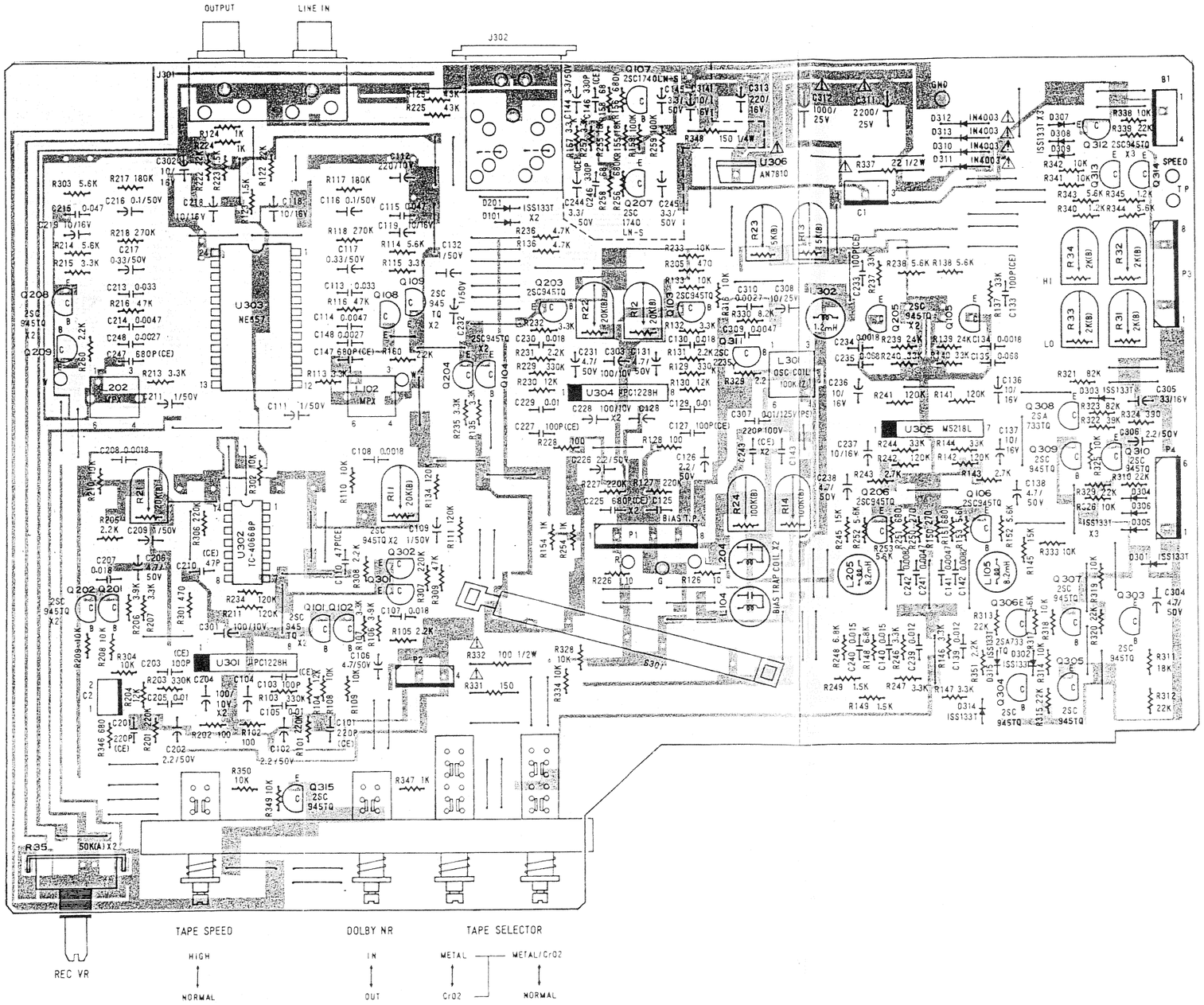


METER PCB ASS'Y (W-315C/W-310C)

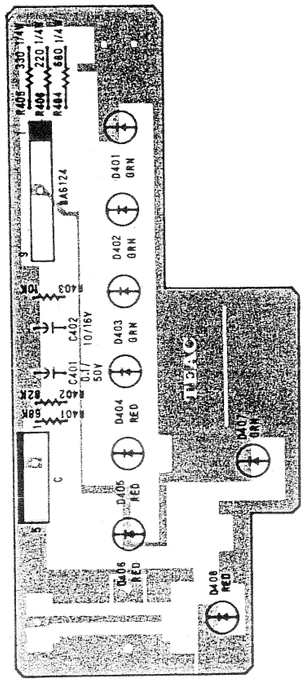


W-315C/W-310C/W-305/W-300

R/P AMPL PCB ASS'Y (W-305/W-300)



METER PCB ASS'Y (W-305/W-300)



POWER SW PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145043300	POWER SW PCB ASSY
	*9155043300	POWER SW PCB
	⚠9135028000	POWER SW

VOLTAGE SELECTOR SW PCB ASSY [GE]
(PC Board Omitted)

REF. NO.	PARTS NO.	DESCRIPTION
	*9145041800	VOLTAGE SELECTOR SW PCB ASSY
	*9155041800	VOLTAGE SELECTOR SW PCB
	⚠ 5332016300	VOLTAGE SELECTOR SW

POWER TRANSFORMER PCB C ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9155043600	POWER TRANSFORMER PCB C
	⚠*5327009200	TERMINAL LAPPING 2P [E]
	⚠*5327009300	TERMINAL LAPPING 3P [A] [UK]

Note
As regards the resistors and capacitors, refer to the circuit diagrams and the PCB ass'y drawings included in this brochure.

Parts marked with *require longer delivery time.

R/P PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145044102	R/P PCB ASSY (W-315C/W-310C) [EXCEPT E]
	*9145044112	R/P PCB ASSY (W-315C/W-310C) [E]
	*9145043101	R/P PCB ASSY (W-305/W-300) [EXCEPT E]
	*9145043111	R/P PCB ASSY (W-305/W-300) [E]
	*9155044100	R/P PCB (W-315C/W-310C)
	*9155043100	R/P PCB (W-305/W-300)
U301	9167010400	IC, μPC1228H
U302	9167009800	IC, TC4066BP
U303	5220427000	IC, CX-20187 (W-315C/W-310C)
	5220427100	IC, NE657 (W-305/W-300)
U304	9167010400	IC, μPC1228H
U305	5220416200	IC, M5218L
U306	⚠9167011500	IC, AN7809 (W-315C/W-310C)
	⚠9167012000	IC, AN7810 (W-305/W-300)
Q101, Q201	9163310020	TR. 2SC945TQ
Q102, Q202	9163310020	TR. 2SC945TQ
Q103, Q203	9163310020	TR. 2SC945TQ
Q104, Q204	9163310020	TR. 2SC945TQ
Q105, Q205	9163310020	TR. 2SC945TQ
Q106, Q206	9163310020	TR. 2SC945TQ
Q107, Q207	9163310120	TR. 2SC1740LN-S [E]
Q108, Q208	9163310020	TR. 2SC945TQ (W-305/W-300)
Q109, Q209	9163310020	TR. 2SC945TQ (W-305/W-300)
Q301-Q305	9163310020	TR. 2SC945TQ
Q306	9163011020	TR. 2SA733TQ
Q307	9163310020	TR. 2SC945TQ
Q308	9163011020	TR. 2SA733TQ
Q309-Q310	9163310020	TR. 2SC945TQ
Q311	9163308900	TR. 2SC2235Y
Q312-Q314	9163310020	TR. 2SC945TQ
Q315	9163310020	TR. 2SC945TQ (W-305/W-300)
D101, D201	9165021220	DIODE 1SS133T-73
D301-D309	9165021220	DIODE 1SS133T-73
D310-D313	⚠9165021160	DIODE IN4003
D314-D315	9165021220	DIODE 1SS133T-73 (W-305/W-300)
L101, L201	9122017501	FILTER, LOWPASS, 100K Hz
L102, L202	9173002500	FILTER, LOWPASS, MPX (W-315C/W-310C)
	9173002400	FILTER, LOWPASS, MPX (W-305/W-300)
L103, L203	9173002700	FILTER, LOWPASS, 19.8KHz (W-315C/W-310C)
L104, L204	9122017600	COIL, BIAS TRAP, 100KHz
L105, L205	9122015300	COIL 8.2mH
L301	9173002200	OSC COIL 100KHz
L302	9122013300	COIL 1.2mH
R11, R21	9112017000	VR, SEMI-FIXED 20K(B)
R12, R22	9112017000	VR, SEMI-FIXED 20K(B)
R13, R23	9112017000	VR, SEMI-FIXED 20K(B) (W-315C/W-310C)
R13, R23	9112000000	VR, SEMI-FIXED 5K(B) (W-305/W-300)
R14, R24	9112002000	VR, SEMI-FIXED 100K(B)
R31, R34	9112016000	VR, SEMI-FIXED 2K(B)
R35	9172015500	VR, REC, 50K(A) x 2
P1, P3	9143176000	PLUG, CONNECTOR, 8P

[US]: U.S.A. [E]: EUROPE [UK]: U.K. [C]: CANADA
[A]: AUSTRALIA [GE]: GENERAL EXPORT [T]: TAIWAN [J]: JAPAN

R/P PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
P2	9143172000	PLUG, CONNECTOR, 4P
P4	9143174000	PLUG, CONNECTOR, 6P
J301	9143184000	PIN JACK 4P
J302	9140096000	DIN SOCKET [E]
S301	9134009100	SW, SUDE, 6-2
S301	9134009000	SW, SLIDE, 7-2 [E]
	9135028500	SW, PUSH, 5 GANG (W-315C/W-310C)
	9135028400	SW, PUSH, 4 GANG (W-305/W-300)
	9160012601	PIN, T.P
R331	△9111046050	R., CANBON R-25JFT, 150 OHM
R332	△9111349000	R., CARBON R-50FF, 100 OHM
R337	△9114233060	R., NONFLAMMABLE R-50FF, 22 OHM

METER PCB ASSY

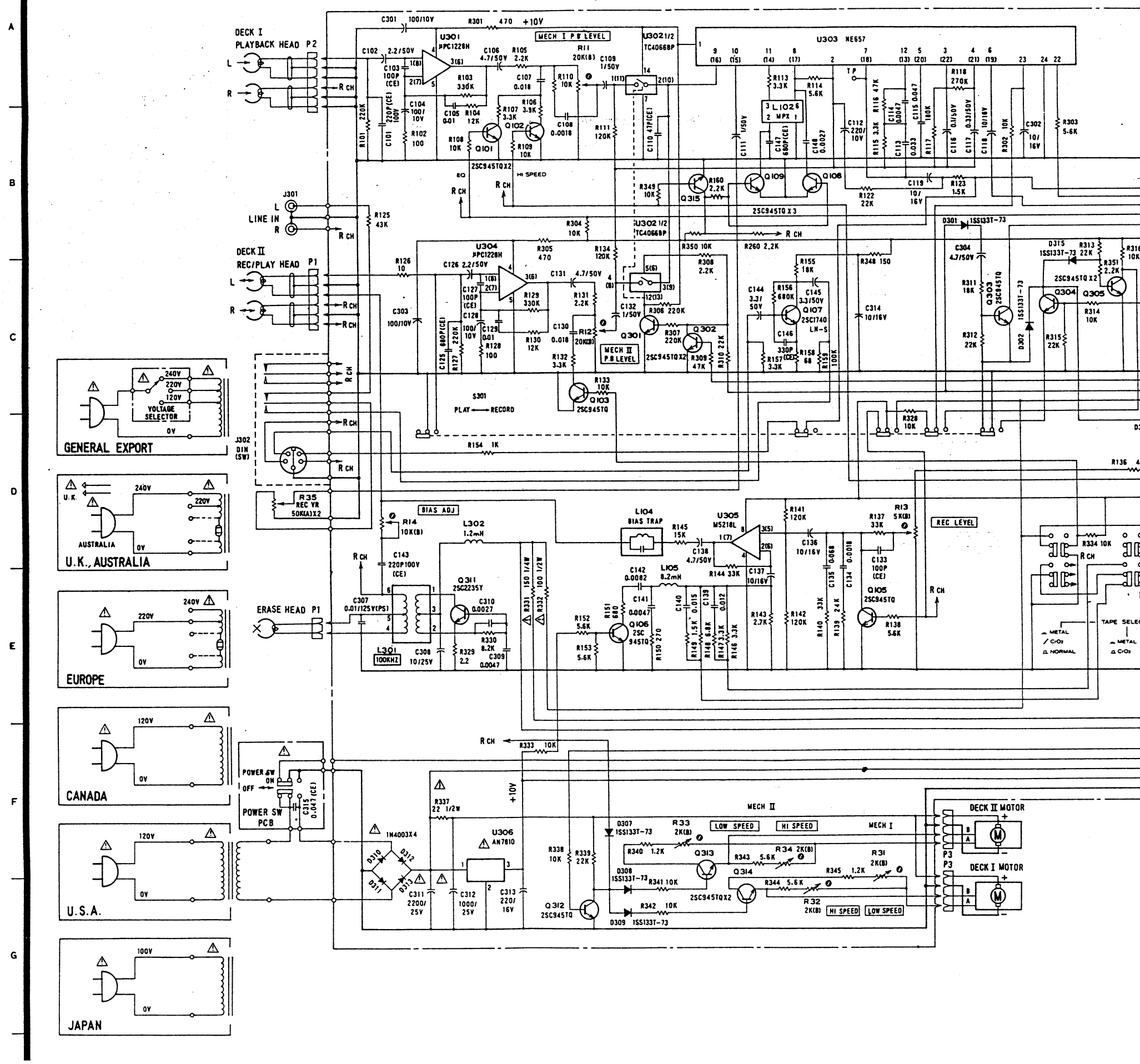
REF. NO.	PARTS NO.	DESCRIPTION
	*9145044200	METER PCB ASSY (W-315C/W-310C)
	*9145043200	METER PCB ASSY (W-305/W-300)
	*9155044200	METER PCB (W-315C/W-310C)
	*9155043200	METER PCB (W-305/W-300)
U401	9167010800	IC, BA6124
R36	9172015700	VR, BIAS FINE, 10K(B) (W-315C/W-310C)
D401-D403	9174011420	LED, GRN, LTL-5134
D404-D406	9174011520	LED, RED, LTL-5124
D407	9174011420	LED, GRN, LTL-5134
D408	9174011520	LED, RED, LTL-5124

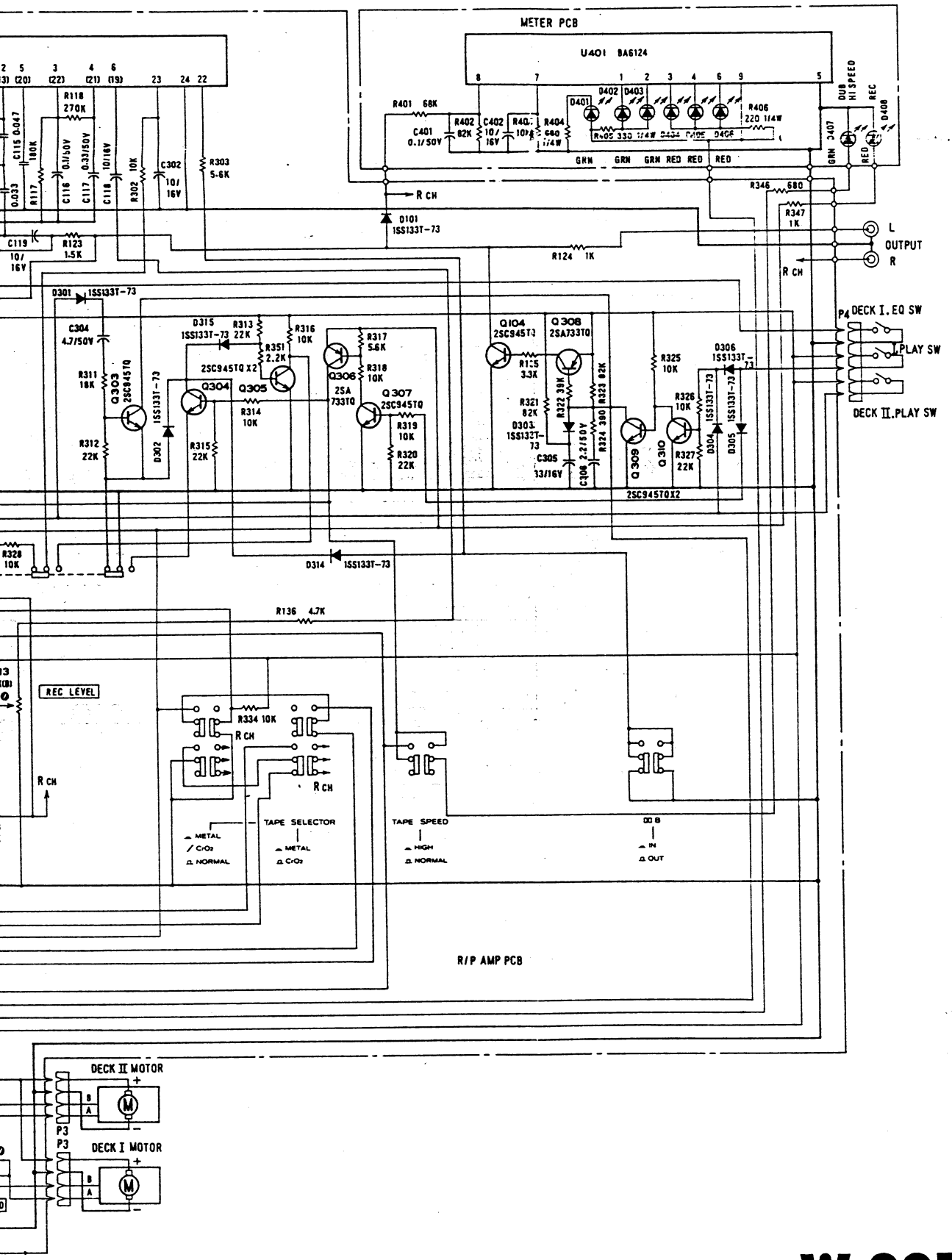
Note
As regards the resistors and capacitors, refer to the circuit diagrams and the PCB ass'y drawings included in this brochure.

Parts marked with *require longer delivery time.

[US]: U.S.A. [E]: EUROPE [UK]: U.K. [C]: CANADA
[A]: AUSTRALIA [GE]: GENERAL EXPORT [T]: TAIWAN [J]: JAPAN

TEAC SCHEMATIC DIAGRAM W-305/W-300





INSTRUCTIONS FOR SERVICE PERSONNEL

BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

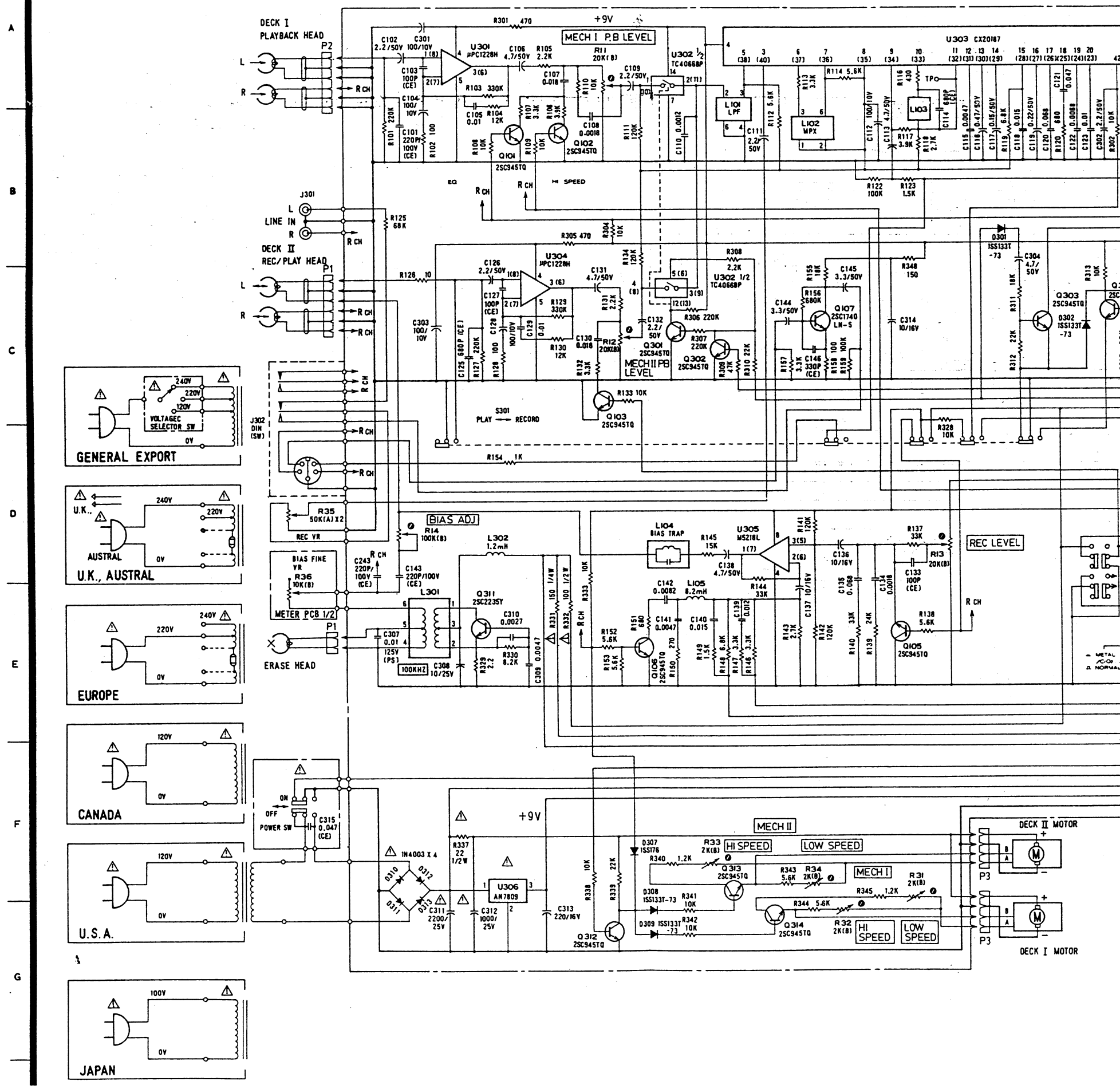
NOTES

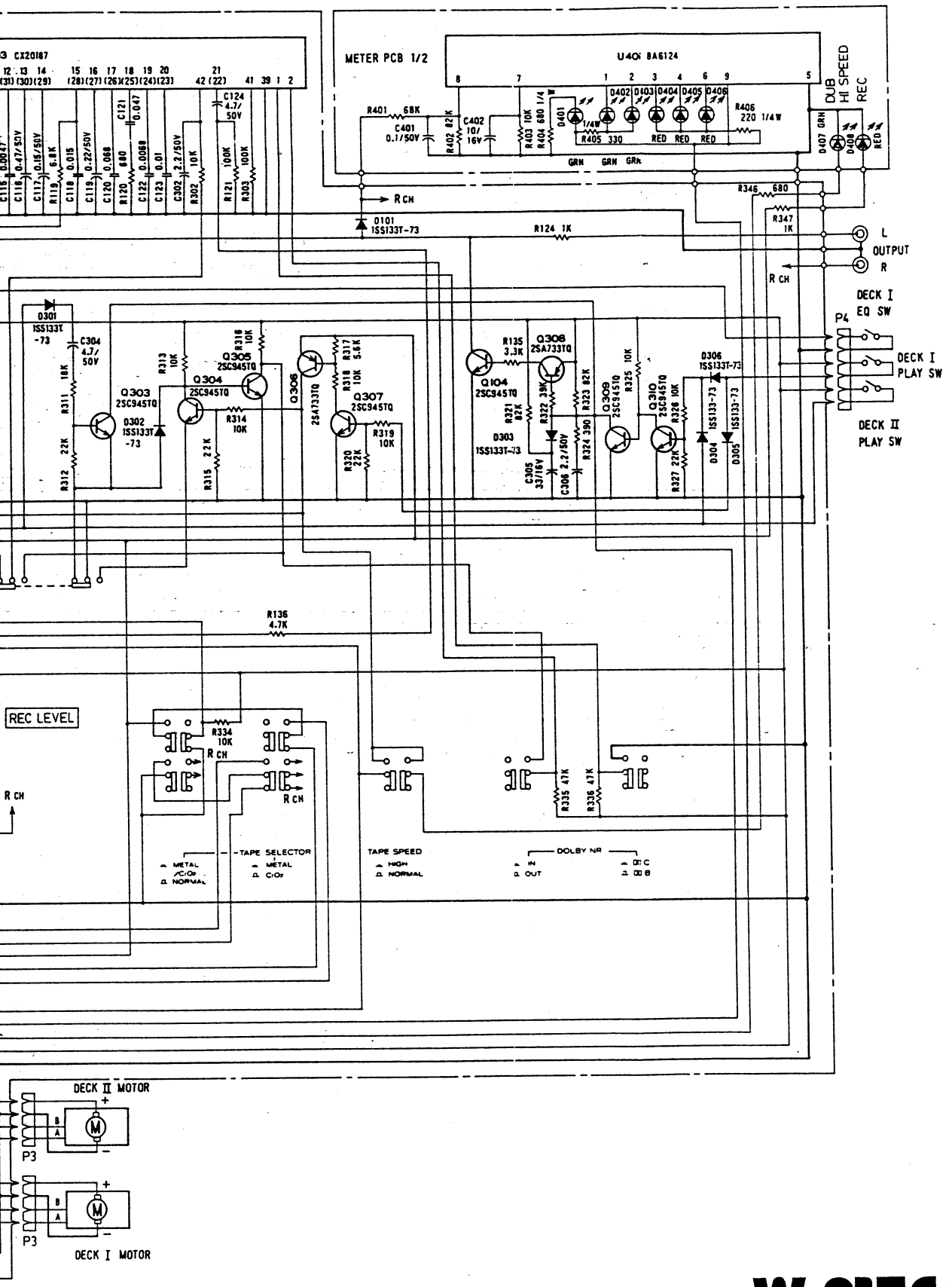
1. Resistor values are in ohms (k=kilo-ohms, M=megohms).
2. Capacitor values are in microfarads (p=picofarads).
3. Voltage and signal level values are for reference only.
   0dB=0.775V
4. ▭ : Front panel indication
5. ┄┄┄ : Rear panel indication
6. ⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components-refer to the appropriate parts list and ensure exact replacement.

W-305/W-300 Stereo Double Cassette Deck

1st Issue; March 1987

TEAC SCHEMATIC DIAGRAM W-315C/W-310C





INSTRUCTIONS FOR SERVICE PERSONNEL

BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

NOTES

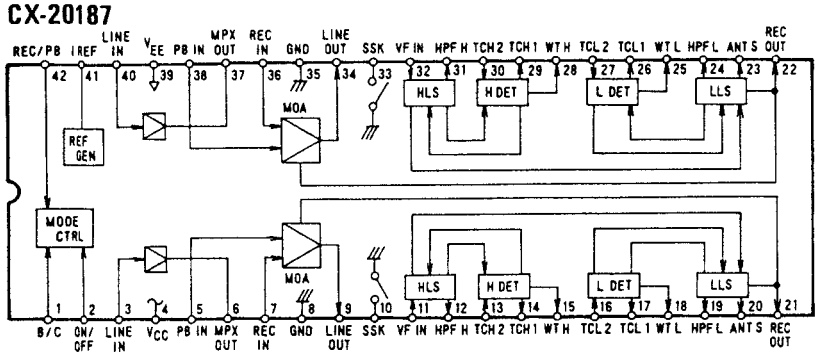
1. Resistor values are in ohms (k=kilo-ohms, M=megohms).
2. Capacitor values are in microfarads (p=picofarads).
3. Voltage and signal level values are for reference only.
   0dB=0.775V
4. ▭ : Front panel indication
5. ┄┄ : Rear panel indication
6. ⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components refer to the appropriate parts list and ensure exact replacement.

W-315C/W-310C Stereo Double Cassette Deck

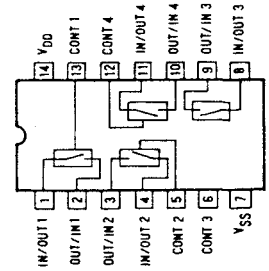
1st Issue; March 1987

IC BLOCK DIAGRAM

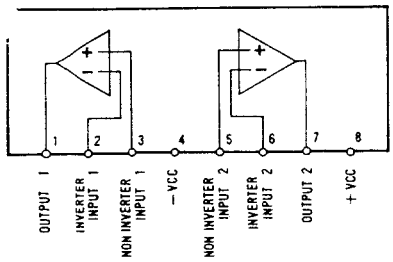
CX-20187



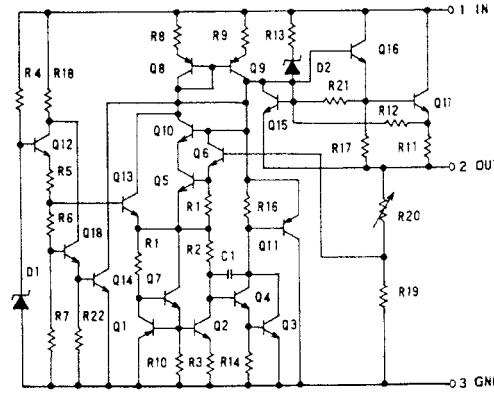
TC-4066BP



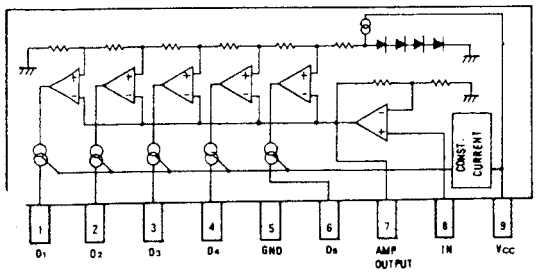
M5218L



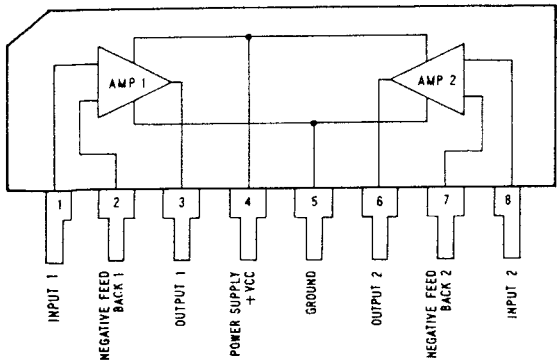
AN7809



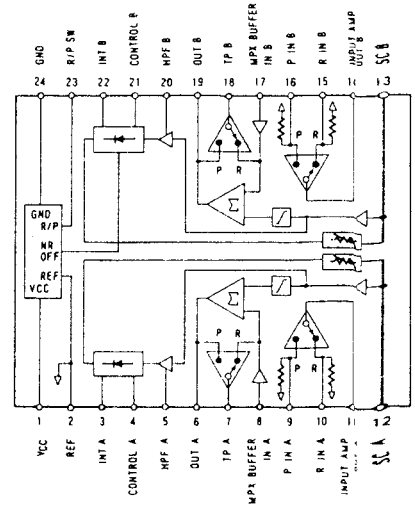
BA6124



μPC1228H



NE657



W-315C/W-310C/W-305/W-300

TEAC®

TEAC CORPORATION	MAIN OFFICE: 3-7-3 NAKACHO MUSASHINO TOKYO PHONE (0422) 53-1111 SALES OFFICE: 4-15-30 SHIMORENJAKU MITAKA TOKYO PHONE (0422) 45-7741
TEAC CORPORATION OF AMERICA	7733 TELEGRAPH ROAD MONTEBELLO CALIFORNIA 90640 PHONE (213) 726-0303
TEAC CANADA LTD.	3610 NASHUA DRIVE UNIT 1 & 2 MISSISSAUGA ONTARIO L4V 1L2 PHONE 416-673-3303
TEAC AUSTRALIA PTY., LTD.	115 WHITEMAN STREET SOUTH MELBOURNE VICTORIA 3205 PHONE 699-6000